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ABSTRACT

Evaluated in this report on Project Concern in Hartford, Connecticut, are (1) the cognitive and affective impact of Project Concern in the school year 1982-83; and (2) the sustained cognitive effects of Project Concern from Spring 1981 to Spring 1983. Project Concern began in September, 1966, as an experiment in educational intervention for children from Title I schools in the north end of Hartford, with emphasis on city-suburb cooperation in desegregtion. For this evaluation, the Metropolitan Achievement Tests in reading, language arts, and mathematics were administered to all program participants (516 suburban students in grades 2-10 and 139 inner-city students in grades 2-8). A student survey was used to measure participants' attitudes toward school and self-concept on a continuing basis. Findings showed the following: (1) Both suburban and inner-city participants tended to exhibit statistically significant basic skill growth in reading, mathematics, and language arts at most grade levels. While such significant absolute growth was reflected in positive relative growth for inner-city participants, this was not always the case for suburban participants. (2) Self-concept and school attitudes of all participants in the areas of school and school work, classroom participation, and perception of teachers were quite positive. (3) The results for sustained cognitive impact were mixed, with some gains being sustained while others were not. (CMG)

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Report 83-26

FINAL EVALUATION REPORT

1982-1983 HARTFORD

PROJECT CONCERN PROGRAM

Conducted by

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Evaluation Consultants
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UD 023 232

Presented to the

Hartford Public Schools

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CHAPTER I

INTRODUCTION AND EVALUATION DESIGN

Introduction

The Hartford Project Concern Program began in September of 1966 as an experiment in educational intervention for children from Title I schools concentrated in the north end of Hartford.[1] Receiving support from many areas (State of Connecticut Department of Education, The Hartford Board of Education, The Hartford Court of Common Council, The Greater Hartford Chamber of Commerce, The Urban League, Community Renewal Team, The NCAAP, The Alliance of Ministers, The PTA, The Archdiocese of Hartford, parents, Boards of Education from the five original participating communities. administrators, teachers, members of the legislature, and religious leaders other than the Alliance of Ministers or the Archdiocese of Hartford), the project developed seven objectives in the original application of the Federal Government for funds under Title IV of the Civil Rights Act of 1964.

These objectives were as follows:

1. To develop a structure between a city and its suburbs that will desegregate schools.

2. To discover the attitudes of children, parents, educators, and the community when city children are bussed to the suburbs.

3. To learn what happens to the educational achievement of both city and suburban children when city children go to suburban schools.

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[1] Information relating to the history and current enrollment status of Project Concern was obtained from project materials.

4. To find out what social activities city children can participate in when they go to school in the suburbs.

5. To encourage Connecticut towns to think about desegregation of schools in regional terms.

6. To train school administrators, teachers, and aides for integrated schools.

7. To find out what communities can do to make bussing effective.

From 1966 to 1979, participation of suburban communities increased from five communities (265 children attending 35 schools) to thirteen communities with 1,058 students attending 75 schools. In addition, during the 1979-80 school year 81 students attended six non-public schools in four communities and 289 students attended five inner-city schools in the south end of Hartford. Beginning with the 1980-81 school year, the Project Concern program was reduced. The non-public school component was eliminated and additional students were not allowed to enter the suburban school aspect of the program.

Over the years there have been several inquiries regarding the effectiveness of Project Concern. More specifically, school boards, educators, and citizens in participating communities have been asking whether Project Concern is successful from an educational standpoint. The difficulty in answering this questions lies in defining the term "successful". Some accept the ability of students of differing races to interact effectively as evidence of the success of Project Concern. Others seek measures of cognitive and affective test growth as evidence of program success.

Two in-depth inquiries into the impact of Project Concern for the suburban, non-public and inner-city components were initiated during the 1975-1976 and 1976-1977 school years when the Capitol Region Education

Council received grants from the Connecticut State Department of Education to evaluate the program. Further information regarding the rationale and results of these two evaluations can be found in the documents entitled 1975-1976 Hartford Project Concern Evaluation Report (Iwanicki, 1976) and An Evaluation of the 1976-1977 Hartford Project Concern Program (Iwanicki and Gable, 1977). Further, during the 1977-1978 and 1978-1979 project years an evaluation of the cognitive and affective growth of students in the suburban component was conducted (see An Evaluation of the 1977-1978 Hartford Project Concern Program, Iwanicki and Gable, 1978, and Final Evaluation Report 1978-1979 Hartford Project Concern Program, Iwanicki and Gable, 1979). More extensive evaluations of Project Concern were conducted during the 1979-1980, 1980-1981, and 1981-1982 school years (see Final Evaluation Report 1979-1980 Hartford Project Concern Program, Iwanicki and Gable, 1980; Final Evaluation Report 1980-1981 Hartford Project Concern Program, Iwanicki and Gable, 1981; Final Evaluation Report 1981-1982 Hartford Project Concern Program, Iwanicki and Gable, 1982). Individuals interested in a summary of the findings of prior evaluations may wish to consult The Hartford Project Concern Program: A Synthesis of the Evaluation Findings from 1976-1980 (Iwanicki and Gable, 1981).

The 1982-1983 Project Concern Evaluation

The evaluation of the 1982-83 Project Concern program focused on the following two areas:

- An examination of the cognitive and affective impact of Project Concern over the current school year.
- An evaluation of the sustained cognitive effects of Project Concern from Spring 1981 to Spring 1983.

Subsequent chapters of this report provide detailed information regarding the evaluation design, procedures, and findings for these two areas.

CHAPTER II

MONITORING THE COGNITIVE AND AFFECTIVE IMPACT OF PROJECT CONCERN

Background and Evaluation Design

For at least the last five years the funding proposal for the Project Concern Program has contained the following performance objectives:

1. Pupils will show month for month gains on an average by grade in Language Development.
2. Pupils will show month for month gains on an average by grade in Math.
3. Pupils will show a positive self-concept and attitude toward the school at the end of a year's participation.

Up through the 1978-1979 school year, evaluations of the cognitive outcomes stated in the program objectives utilized individually administered achievement tests (i.e., the Woodcock Reading Mastery Tests and the KeyMath Diagnostic Arithmetic Test). These tests were administered to a random sample of students at grades 1-8 on a pre- to post test basis. Then, the results were analyzed and reported as they relate to the program objectives.

Some disadvantages to this approach were evident. First, there were some problems in implementing a pre- to post test design on a yearly basis. By the time new participants were selected, transfers were made, project files were updated, and the logistics of sampling as well as pretesting were worked out, students were not pretested until late November or early December. Given that post testing must be conducted in May, there were only about five to six months between the times of pre- and post testing.

This is a relatively short period of time for examining pre- post test growth.

Secondly, although the results provided evidence of student growth, such growth could not be compared to the growth of comparable students in Hartford since the same tests were not used with the general population of students in the Hartford Public Schools. Also, some Project Concern students were becoming exceedingly test wise on the Woodcock and KeyMath. Alternative forms of these tests were used on a pre- to post test basis for five years. Since the same level was used at grades 1-8, students at the upper grade levels were very familiar with the content of the test exercises. A final disadvantage of the approach used in past evaluations was that some members of the education community and the public questioned the credibility of results based on a random sample.

To alleviate these problems, it was decided that the 1979-1980 and subsequent evaluations of Project Concern would monitor the cognitive performance of all Project Concern students at grades 2-8 on a year-to-year basis using the same group administered achievement tests that are being used in the Hartford Public Schools. During the 1981-82 school year it was decided that Project Concern participants at grades 9 and 10 would also be tested. Appropriate levels and forms of the Metropolitan Achievement Tests in reading, language, and mathematics would be administered to all project participants in the spring according to the testing schedule used in the Hartford Public Schools. Results from these instruments would be analyzed on a pre- to post test basis (i.e., spring of one year to spring of the next year) and reported as they relate to the objectives of Project Concern.

Along with the Metropolitan Achievement Tests, Project Concern students would also be administered a brief ten-item Student Survey. This Student Survey, developed for use in past evaluations of Project Concern, would be used to monitor Project Concern participants' attitude toward school and self-concept on a continuing basis.

Consistent with this policy for monitoring the cognitive performances of Project Concern students, all participants at grades 2-10 were administered the appropriate level and form of the 1978 version of the Metropolitan Achievement Tests in the spring of 1983. At the same time, students at grades 2-8 were administered the Student Survey. The Metropolitan Achievement Tests were administered to all students participating in the Suburban Public and Inner-City school components of the program. Participating suburban school districts accepted responsibility for testing all Project Concern students in their community using the test materials provided by the Hartford Public Schools.

It is important to note that during the 1979-1980 school year, the Metropolitan Achievement Tests were administered to suburban participants by Hartford Test Specialists. This approach was not used during the 1980-1981, 1981-1982, or 1982-1983 school years due to the problems encountered by Hartford Test Specialists. Given the time needed to administer the Metropolitan Achievement Tests, it was difficult to administer these tests to students in suburban schools without disrupting their educational program somewhat. In some cases students at the upper grade levels resented being taken away from their normal school activities to be tested, especially by "strangers." Students participating in the Inner-City component of the program were administered the Metropolitan Achievement Tests by their classroom teacher as part of the Hartford Public Schools

spring testing program. Project Concern participants were tested according to the following schedule:

Grades 5-8: March 7-17

Grades 2-4 and 9-10: April 5-14

Students were tested in the areas of reading, language and mathematics using the forms and levels of the Metropolitan Achievement Tests noted below:

Grade	MATs Level	Form
2	Primary 2	JS
3-4	Elementary	JS
5-6	Intermediate	JS
7-9	Advanced 1	JS
10	Advanced 2	JS

At grades 2-4 students were tested using machine scorable booklets, while at grades 5-10 separate machine scorable answer sheets were used. All tests were scored and results reported using the computer facilities of the Hartford Public Schools. Some points need to be clarified concerning the testing activities as they relate to the evaluation of the cognitive impact of Project Concern. First, only Project Concern Suburban participants were tested at grades 9 and 10. The Inner-City component of the Concern programs does not operate beyond grade 8. Secondly, since test results were not available for Inner-City participants at grade 3, these outcomes could not be analyzed. In summary, subsequent analysis of Metropolitan Achievement Tests growth will focus on grades 3-10 for students in the Suburban component of Project Concern and on grades 4-8 for students in the Inner-City program. The number of Project Concern students for whom

spring 1983 results were provided is summarized below by grade level and program component.

Grade	Suburban	Inner-City
2	13	10
3	44	10
4	41	25
5	66	23
6	67	23
7	67	22
8	92	26
9	88	
10	78	

It is important to note that some difficulty was encountered in testing Suburban Project Concern students. Personnel in participating suburban school settings were less than positively motivated to conduct the required testing activities given that the Hartford Board of Education has not taken a position regarding the future of the Suburban Project Concern Program.

Assessing the Achievement Growth of Project Concern Participants

As noted in the prior section, the basic approach being utilized to assess the achievement growth of Project Concern participants is to compare the Metropolitan Achievement Test (MAT) results from the spring of one year to those for the spring of the next school year. Thus, in this year's evaluation of Project Concern, the MAT results obtained for spring 1982 and spring 1983 were compared. In using this approach, spring to spring MAT results must be collated by student. Some students who were tested in the spring of 1983 were not tested in the spring of 1982, either because they

were absent or because they were not enrolled in Project Concern at that time. The number and percent of students tested in the spring of 1983 for whom spring 1982 MAT results were available is summarized below by grade level and program component.

Grade	Suburban		Inner-City	
	N	%	N	%
3	39	87	-	0
4	39	95	19	76
5	61	92	11	48
6	65	97	19	83
7	67	100	22	100
8	90	98	23	88
9	79	90		
10	75			

In comparing spring 1982 and spring 1983 test results, it is important to note that different test schedules were used during these two administrations of the MATs. In examining the MAT achievement growth, the testing times and growth periods noted below should be kept in mind.

Grade	Spring 1982 MAT Testing Time	Spring 1983 MAT Testing Time	Growth Period
3	2.8	3.7	9 months
4	3.8	4.7	9 months
5	4.8	5.6	8 months
6	5.6	6.6	10 months
7	6.6	7.6	10 months
8	7.6	8.6	10 months
9	8.6	9.7	11 months
10	9.7	10.7	10 months

Procedures for Assessing Achievement Growth

To assess the amount of achievement growth exhibited by Project Concern participants, mean standard scores were calculated by grade level in the areas of reading, language, and mathematics for the spring of 1982 and spring 1983 results. Using appropriate spring norm tables for the 1978 edition of the MATs, spring 1982 and spring 1983 scaled score means were then converted into mean percentile ranks and mean normal curve equivalent scores. The difference between the spring 1982 and spring 1983 mean normal curve equivalent scores in the basic skill areas was used as a measure of mean growth. The results of these analyses are summarized by grade level and program component in Tables 1-2.

In reviewing these tables, it is important to note that scaled scores provide a measure of student achievement in equal interval units. These scaled scores can be compared across forms and levels of the Metropolitan Achievement Tests within a particular skill area. For example, in the area of Reading for the spring 1983 testing, it is evident that sixth grade Suburban school students exhibited a higher level of performance (746) than fourth grade Suburban school students (705). It is important to note that scaled scores cannot be compared across skill areas. For example at grade 4, one cannot conclude that the spring 1983 Reading performance of students in the Suburban school component (705) is superior to their Mathematics performance (625).

Tables 1 and 2 also contain percentile (%ile) scores. Percentile scores can be explained best using an example. A percentile score of 40 in Reading for grade 3 Suburban participants indicates that on the average, their performance was better than or equal to 40% of the students in the norming population taking that test in the spring at grade 3. Percentiles

Table 1

Summary by Grade Level of Mean Metropolitan Achievement Test
Spring 1982 (Pre-) and Spring 1982 (Post) Results
for Project Concern Students

Suburban Component

Grade	N	[1]Type of Score	Reading			Language			Mathematics		
			Pre-	Post	Growth	Pre-	Post	Growth	Pre-	Post	Growth
3	39	SS	609	641	32**	499	582	83**	494	520	26**
		%ile	45	40	-5	58	50	-8	43	30	-13
		NCE	47.4	44.7	-2.7	54.2	50.0	-4.2	46.3	39.0	-7.3
4	39	SS	662	705	43**	603	671	68**	579	625	46**
		%ile	50	55	5	57	61	4	56	51	-5
		NCE	50.0	52.6	2.6	53.7	55.9	2.2	53.2	50.5	-2.7
5	61	SS	681	705	24**	637	674	37**	608	655	47**
		%ile	43	43	-	50	47	-3	43	46	3
		NCE	46.3	46.3	-	50.0	48.4	-1.6	46.3	47.9	1.6
6	65	SS	712	746	34**	680	726	46**	664	700	36**
		%ile	46	54	8	50	56	6	50	49	-1
		NCE	47.9	52.1	4.2	50.0	53.2	3.2	50.0	49.5	-.5
7	67	SS	738	747	9	722	757	35**	712	734	22**
		%ile	50	46	-4	55	56	1	56	50	-6
		NCE	50.0	47.9	-2.1	52.6	53.2	0.6	53.2	50.0	-3.2
8	30	SS	733	764	31**	735	775	40**	724	759	35**
		%ile	40	44	4	49	54	5	43	49	6
		NCE	44.7	46.8	2.1	49.5	52.1	2.6	46.3	49.5	3.2
9	79	SS	771	793	22**	769	794	25**	752	771	19**
		%ile	48	50	2	51	54	3	46	46	-
		NCE	48.9	50.0	1.1	50.5	52.1	1.6	47.9	47.9	-
10	75	SS	796	787	-9	793	794	1	772	777	5
		%ile	52	36	-16	54	47	-7	47	43	-4
		NCE	51.1	42.5	-8.6	52.1	48.4	-3.7	48.4	46.3	-2.1

[1]Note: SS=Scaled Score; %ile=Percentile Rank; NCE=Normal Curve Equivalent **p < .01

Table 2

Summary by Grade Level of Mean Metropolitan Achievement Test
Spring 1982 (Pre-) and Spring 1983 (Post) Results
for Project Concern Students

Inner-City Component

Grade	N	[1]Type of Score	Reading			Language			Mathematics		
			Pre-	Post	Growth	Pre-	Post	Growth	Pre-	Post	Growth
4	19	SS	652	693	41**	605	664	59**	610	634	24
		%ile	45	49	4	58	59	1	69	56	-13
		NCE	47.4	49.5	2.1	54.2	54.8	0.6	60.4	53.2	-7.2
5	11	SS	658	667	9	631	668	37	652	674	22
		%ile	32	23	-9	48	45	-3	64	54	-10
		NCE	40.1	34.4	-5.7	48.9	47.4	-1.5	57.5	52.1	-5.4
6	19	SS	710	739	29**	693	742	49**	669	710	41**
		%ile	46	51	5	55	61	6	52	56	4
		NCE	47.9	50.5	2.6	52.6	55.9	3.3	51.1	53.2	2.1
7	22	SS	719	720	1	719	718	-1	703	719	16
		%ile	41	32	-9	54	43	-11	53	40	-13
		NCE	45.2	40.1	-5.1	52.1	46.3	-5.8	51.6	44.7	-6.9
8	23	SS	710	740	30**	689	727	38**	710	740	30**
		%ile	27	31	4	32	34	2	36	41	5
		NCE	37.1	39.6	2.5	40.1	41.3	1.2	42.5	45.2	2.7

[1]Note: SS=Scaled Score; %ile=Percentile Rank; NCE=Normal Curve Equivalent

**p < .01

are not expressed in equal interval units. The difference between scores at the 80th and 90th percentiles is not the same as the difference between scores at the 50th and 60th percentiles. Percentiles can be standardized (i.e., converted to equal interval units) by converting them to normal curve equivalents (NCE). Normal curve equivalents are also reported in Tables 1-2.

An NCE of 50 is indicative of average performance for students at that grade level in the skill areas tested. For example, Suburban Concern pupils at grade 4 exhibited average performance on their pretest at grade 3 in Reading as evidenced by an NCE of 50. To the extent that the NCE departs from 50, students exhibit above or below average performance in the skill area tested.

Title I evaluation guidelines require that growth in the basic skill areas should be determined by examining the pre- and post test change in the mean normal curve equivalent performance of the students being served. This approach was utilized in assessing the achievement growth of Project Concern participants. In reviewing Tables 1-2, the following points should be kept in mind:

a) A positive NCE gain indicates students have improved their relative standing regarding the national norm group.

b) A zero NCE gain indicates the relative standing of students has not changed regarding the national norm group.

c) A negative NCE gain indicates students have fallen behind in relative standing regarding the national norm group.

Findings Regarding the Cognitive Impact of Project Concern

A basic question which arises in reviewing Tables 1-2 is - what do these results tell us about the basic skill growth of Project Concern participants? Achievement growth can be examined on an absolute and on a relative basis. In assessing absolute growth, one is asking the question - how much basic skill growth have Project Concern students exhibited? A measure of absolute growth is provided by comparing spring 1982 to spring 1983 standard score means for each of the skill areas tested. These results are presented by grade level in Tables 1-2. To determine whether the spring to spring basic skill growth exhibited was statistically significant, correlated t-tests for the differences between means were conducted. In measuring the absolute achievement growth of Project Concern participants based on the results presented in Tables 1-2, the following conclusions can be drawn:

> With the exception of grades 7 and 10, Suburban Project Concern participants exhibited statistically significant (.01 level) basic skill growth in Reading, Language, and Mathematics.
>
> At grade 7, Suburban Project Concern participants exhibited statistically significant (.01 level) basic skill growth in Language and Mathematics, but not in Reading.
>
> At grade 10, Suburban Project Concern Participants did not exhibit statistically significant (.01 level) growth in any of the skill areas tested.
>
> At grade 4, Inner-City Project Concern participants exhibited statistically significant (.01 level) basic skill growth in Reading and Language, but not in Mathematics.
>
> At grades 6 and 8, Inner-City Project Concern participants exhibited statistically significant (.01 level) basic skill growth in Reading, Language, and Mathematics.

At grades 5 and 7, Inner-City Project Concern participants did not exhibit statistically significant (.01 level) growth in any of the skills areas tested.

In assessing relative growth, one is asking the question - is a result of the achievement progress exhibited in the areas tested, has the relative standing of the students changed regarding the national norm group? Percentile ranks and normal curve equivalents provide a measure of the relative standing of a group in relation to the national norm. As noted earlier, normal curve equivalents are preferable to percentiles because NCEs are expressed in equal interval units. The relative basic skill growth of Project Concern participants was determined by comparing the spring 1982 and spring 1983 mean NCE performance for each of the skill areas tested. These results are summarized in Table 3. In assessing the relative achievement growth of Project Concern participants based on the results presented in Table 3, the following conclusions can be drawn:

Inner-City Project Concern participants tended to exhibit relative basic skill growth in those areas at each grade level where statistically significant absolute growth was evident. This indicates that the statistically significant basic skill progress exhibited by these students was generally reflected in an improvement in their standing relative to the national norm group.

For Suburban Project Concern participants, the relationship between absolute and relative basic skill growth tended to be mixed. For Reading and Language, relative basic skill growth was exhibited at most grade levels when statistically significant growth was evident. For Mathematics, statistically significant basic skill growth often was not reflected in an improvement in the students' standing relative to the national norm group.

Table 3

Summary of Mean Normal Curve Equivalent Achievement Growth by
Grade Level, Skill Area, and Program Component for Project Concern Participants

Grade	No. of Students		Reading		Language		Mathematics	
	Suburban	Inner-City	Suburban	Inner-City	Suburban	Inner-City	Suburban	Inner-City
3	39	0	-2.7	-	-4.2	-	-7.3	-
4	39	19	2.6	2.1	2.2	0.6	-2.7	-7.2
5	61	11	-	-5.7	-1.6	-1.5	1.6	-5.4
6	65	19	4.2	2.6	3.2	3.3	-0.5	2.1
7	67	22	-2.1	-5.1	0.6	-5.8	-3.2	-6.9
8	90	23	2.1	2.5	2.6	1.2	3.2	2.7
9	79	0	1.1	-	1.6	-	-	-
10	75	0	-8.6	-	-3.7	-	-2.1	-

To obtain further insights regarding the relative basic skill achievement growth of Project Concern participants, NCE Reading and Mathematics results were analyzed by grouping students on the basis of their spring 1982 percentile rank. Four categories were formed as follows:

23rd percentile and below

24th - 36th percentile

37th - 50th percentile

51st percentile and above

Mean NCE reading and mathematics growth is reported for each of these categories by grade level in Tables 4-5. Such data are informative since they provide a measure of relative growth for students of different proficiency levels as determined by their pretest performance. From Tables 4-5 it is evident that a clean relationship does not exist between students' proficiency levels and the amount of Reading and Mathematics growth exhibited. Some trends which emerged are the following:

> For both Suburban and Inner-City Project Concern Participants, students at or below the 50th percentile at most grade levels tended to exhibit the most NCE growth in Mathematics.

> For both Suburban and Inner-City Project Concern Participants, students at or below the 50th percentile at most grade levels tended to exhibit the most NCE growth in Reading. At many grade levels substantial Reading growth was achieved by students at or below the 23rd percentile.

In summary, both Suburban and Inner-City Project Concern participants tended to exhibit statistically significant basic skill growth in the areas of Reading, Language, and Mathematics at most grade levels. While such significant absolute growth was reflected in positive relative growth for Inner-City participants, this was not always the case for Suburban participants.

Table 4

Summary by Grade Level and Percentile Category of
Mean Metropolitan Achievement Test Spring 1982 (Pre-) and
Spring 1983 (Post) NCE Results for Project Concern Students

Suburban Component

Grade	%ile Category	Reading N	Reading Pre-	Reading Post	Reading Growth	Mathematics N	Mathematics Pre-	Mathematics Post	Mathematics Growth
	23 and below	6	29.1	34.4	5.3	6	24.2	24.2	-
	24-26	8	39.6	41.9	2.3	8	39.0	33.0	-6.0
3	37-50	5	45.2	41.9	-3.3	12	46.3	36.5	-9.8
	51 and above	19	62.3	50.0	-12.3	11	65.6	54.2	-11.4
	Total	38	47.4	44.7	-2.7	37	46.3	39.0	-7.3
	23 and below	3	31.5	27.2	-4.3	3	32.3	27.2	-5.1
	24-36	4	39.0	37.7	-1.3	5	39.6	39.6	
4	37-50	15	48.4	56.4	8.0	8	47.4	46.8	-0.6
	51 and above	17	60.4	57.0	-3.4	22	61.0	58.7	-2.3
	Total	39	50.0	52.6	2.6	38	53.2	50.5	-2.7
	23 and below	15	24.2	29.1	4.9	15	27.2	33.0	5.8
	24-36	11	39.0	37.1	-1.9	14	38.3	40.1	1.8
5	37-50	13	46.3	47.4	1.1	8	47.9	49.5	1.6
	51 and above	22	63.5	61.0	-2.5	24	63.5	58.7	-4.8
	Total	61	46.3	46.3	-	61	46.3	47.9	1.6
	23 and below	12	29.1	35.8	6.7	6	26.3	40.7	14.4
	24-36	11	39.0	44.7	-7.7	8	38.3	37.7	-0.6
6	37-50	15	45.8	55.3	9.5	16	46.3	55.3	9.0
	51 and above	27	60.4	61.7	1.3	33	57.5	57.0	-0.5
	Total	65	47.9	52.1	4.2	63	50.0	49.5	-0.5
	23 and below	5	33.0	29.9	-3.1	3	24.2	32.3	8.1
	24-36	15	39.0	39.0	-	8	38.3	37.7	-0.6
7	37-50	17	46.8	44.7	-2.1	22	46.8	41.3	-5.5
	51 and above	29	61.7	57.5	-4.2	34	65.9	57.5	-7.4
	Total	66	50.0	47.9	-2.1	67	53.2	50.0	-3.2
	23 and below	18	27.2	29.9	2.7	18	24.2	37.7	13.5
	24-36	23	37.7	39.6	1.9	18	39.6	43.6	4.0
8	37-50	19	46.8	50.0	3.2	21	46.8	47.9	1.1
	51 and above	26	58.7	59.3	0.6	32	59.9	60.4	0.5
	Total	86	44.7	46.8	2.1	89	46.3	49.5	3.2
	23 and below	13	24.2	27.2	3.0	12	27.2	32.5	5.3
	24-36	14	37.7	43.6	5.9	16	38.3	39.0	0.7
9	37-50	24	47.4	47.4	-	25	45.8	45.8	-
	51 and above	28	63.5	64.2	0.7	26	64.2	63.5	-0.7
	Total	79	48.9	50.0	1.1	79	47.9	47.9	-
	23 and below	13	21.8	20.4	-1.4	13	25.3	33.0	7.7
	24-36	7	36.5	38.3	1.8	16	38.3	37.7	-0.6
10	37-50	13	46.3	39.0	-7.3	15	46.8	44.1	-2.7
	51 and above	41	61.7	50.5	-11.2	31	63.5	54.2	-9.3
	Total	74	51.1	42.5	-8.6	75	48.4	46.3	-2.1

Table 5

Summary by Grade Level and Percentile Category of
Mean Metropolitan Achievement Test Spring 1982 (Pre-) and
Spring 1983 (Post) NCE Results for Project Concern

Inner-City Component

Grade	%ile Category	Reading N	Reading Pre-	Reading Post	Reading Growth	Mathematics N	Mathematics Pre-	Mathematics Post	Mathematics Growth
	23 and below	3	23.0	33.0	10.0	3	28.2	35.1	6.9
	24-36	2	41.9	37.7	-4.2	2	39.0	37.1	-1.9
4	37-50	7	45.8	53.2	7.4	1	46.8	61.0	14.2
	51 and above	6	66.3	57.5	-8.8	12	73.7	59.9	-13.8
	Total	18	47.4	49.5	2.1	18	60.4	53.2	-7.2
	23 and below	5	29.9	24.2	-5.7	0	-	-	-
	24-36	3	39.0	34.4	-4.6	2	42.5	52.6	10.1
5	37-50	2	45.8	45.2	-0.6	3	47.4	44.7	-2.7
	51 and above	1	81.1	63.5	-17.6	6	67.7	55.9	-11.8
	Total	11	40.1	34.4	-5.7	11	57.5	52.1	-5.4
	23 and below	4	24.2	33.0	8.8	4	30.7	46.3	15.6
	24-36	3	37.7	39.0	7.5	2	38.3	42.5	4.2
6	37-50	4	46.8	55.2	8.4	1	46.8	39.0	-7.8
	51 and above	7	63.5	62.3	-1.2	11	59.9	58.7	-1.2
	Total	18	47.9	50.5	2.6	18	51.1	53.2	2.1
	23 and below	1	32.3	32.3	-	1	26.3	25.3	-1.0
	24-36	5	39.6	32.3	-7.3	3	40.1	36.5	-3.6
7	37-50	10	44.7	42.5	-2.2	9	47.4	43.0	-4.4
	51 and above	5	55.9	46.8	-9.1	8	64.2	52.6	-11.6
	Total	21	45.2	40.1	-5.1	21	51.6	44.7	-6.9
	23 and below	8	25.3	26.3	1.0	6	21.8	23.0	1.2
	24-36	6	37.1	40.1	3.0	6	39.0	42.5	3.5
8	37-50	6	45.8	43.6	-2.2	3	48.9	49.5	0.6
	51 and above	2	59.9	70.9	11.0	7	58.7	61.0	2.3
	Total	22	37.1	39.6	2.5	22	42.5	45.2	2.7

These findings lead to the question - why didn't Suburban participants make sufficient skill progress to exhibit more substantial relative growth? One viable explanation for this lack of more substantial relative growth may be the manner in which the achievement testing was conducted in the suburbs. While Inner-City participants were administered the Metropolitan Achievement Tests by their classroom teachers as part of the Hartford Public Schools testing program, Suburban participants were taken out of their classroom (i.e., away from their normal routine of school activities) to be tested. As noted earlier, these tesing arrangements may have deteriorated further since suburban personnel were being required to test Project Concern students as part of the evaluation of a program which the Hartford Board of Education was threatening to terminate. This combination of reactive testing arrangements and low moral due to the uncertain future of Project Concern could have affected student test performance sufficiently to result in lower test scores and thus, the lack of more substantive relative basic skill achievement growth on the part of Suburban Project Concern participants. In subsequent years, it is important to systematically monitor the manner and atmosphere in which the testing of Suburban Concern participants is conducted. Participating suburban school systems should be consulted in the design of a more efficient and effective process for testing Suburban Project Concern participants.

Monitoring Affective Impact

Several research studies have shown that affective variables relate to school achievement (see Bloom, Human Characteristics and Student Learning and Purkey, Self-Concept and School Achievement). Consistent with this research, the Student Survey was developed during the 1977-1978 evaluation

of Project Concern to examine the affective impact of the program during each program year.

The Student Survey contains 10 items which were selected from the Instructional Objectives Exchange nationally normed item pool for assessing the areas of self-concept and attitude toward school. Given the close relationship between how students feel about themselves (self-concept) and their attitudes toward various school situations, the set of 10 items was selected to generally reflect both constructs. The complete sets of self-concept and attitude toward school items could not be employed as separate measures due to test length considerations. Since the items selected do represent the self-concept and school attitude domains, they can be employed validly to assess students' status.

The Student Survey was administered during the spring of 1983 to participants in the Suburban and Inner-City components of Project Concern at grades 2-10 at the same time as these students were administered the Metropolitan Achievement Tests. Table 6 contains the combined totals, percents and frequencies for all Project Concern students selecting the "True" responses on the Student Survey. Perusal of the combined totals responses in Table 6 indicates that, overall, the students in Project Concern continue to have positive self-concepts and attitudes toward school. This statement can be supported further by an analysis of the individual items in the survey. Tables 7-8 contain an item by grade level summary of responses to the Student Survey for Suburban and Inner-City participants. The 10 items used in the survey reflected three general areas: feelings about school and school work, attitudes toward classroom participants, and feelings about teachers. The responses to the items were consistent with the data from previous evaluations.

Table 6

Percent and Frequency of "True" Responses
on the Student Survey for Students Participating in
All Components of the Project Concern Program

N = (676)[a]

Item Stem	Combined Totals
1. School work is fairly easy for me.	72% (481)
2. My teachers usually like me.	87% (585)
3. I can get good grades if I want to.	92% (619)
4. I often volunteer to do things in class.	65% (437)
5. I often get discouraged in school.	39% (263)
6. I am slow in finishing my school work.	26% (175)
7. I am proud of my work.	82% (543)
8. I am not doing as well in school as I would like to.	56% (375)
9. I find it hard to talk in front of class.	46% (308)
10. I don't like to be called on in class.	24% (159)

[a] The sample size per item can vary slightly due to missing data.

Table 7

Percent and Frequency of "True" Responses on the Student Survey
By Grade Level for Students Participating in the Suburban Schools Component of
The Project Concern Program
(N = 540)[a]

Item Stem	Grade Level 2 (N=13)	3 (N=41)	4 (N=40)	5 (N=67)	6 (N=66)	7 (N=63)	8 (N=87)	9 (N=88)	10 (N=74)	Total (N=540)[a]
*1. School work is fairly easy for me.	62% (8)	56% (23)	70% (28)	70% (47)	82% (54)	63% (40)	77% (67)	75% (67)	80% (59)	73% (393)
2. My teachers usually like me.	92% (12)	80% (33)	93% (37)	82% (55)	82% (54)	87% (55)	95% (83)	89% (79)	88% (65)	88% (473)
*3. I can get good grades if I want to.	92% (12)	80% (33)	85% (34)	82% (55)	94% (62)	97% (61)	99% (86)	96% (85)	97% (72)	92% (500)
*4. I often volunteer to do things in class.	77% (10)	80% (33)	78% (31)	81% (54)	71% (47)	49% (31)	55% (48)	57% (51)	64% (47)	65% (352)
5. I often get discouraged in school.	38% (5)	37% (15)	43% (17)	39% (26)	50% (33)	27% (17)	40% (35)	31% (28)	34% (25)	37% (201)
6. I am slow in finishing my school work.	23% (3)	29% (12)	23% (9)	28% (19)	20% (13)	30% (19)	31% (27)	24% (21)	19% (14)	26% (137)
*7. I am proud of my school work.	92% (12)	90% (37)	88% (35)	93% (62)	94% (62)	78% (49)	78% (68)	69% (61)	65% (48)	81% (434)
8. I am not doing as well in school as I would like to do.	38% (5)	41% (17)	43% (17)	37% (25)	41% (27)	70% (44)	67% (58)	65% (58)	62% (46)	55% (297)
9. I find it hard to talk in front of the class.	38% (5)	71% (29)	68% (27)	40% (27)	42% (28)	54% (34)	49% (43)	30% (27)	31% (23)	45% (243)
10. I don't like to be called on in class.	38% (5)	34% (14)	15% (6)	12% (8)	20% (13)	32% (20)	30% (26)	20% (18)	19% (14)	23% (124)

[a]The sample size per item can vary slightly due to missing data.

*Responses to this item differed significantly across grade levels ($p < .05$).

Table 8

Percent and Frequency of "True" Responses on the Student Survey
By Grade Level for Students Participating in the Inner-City Schools Component
of the Project Concern Program
(N = 132)[a]

Item Stem	Grade Level 2 (N=5)	3 (N=19)	4 (N=14)	5 (N=23)	6 (N=23)	7 (N=19)	8 (N=29)	Total (N=132)[a]
1. School work is fairly easy for me.	40% (2)	84% (16)	50% (7)	43% (10)	61% (14)	68% (13)	90% (26)	68% (88)
2. My teachers usually like me.	80% (4)	95% (18)	100% (14)	83% (19)	91% (21)	68% (13)	79% (23)	86% (112)
3. I can get good grades if I want to.	80% (4)	74% (14)	100% (14)	87% (20)	100% (23)	95% (18)	90% (26)	90% (119)
*4. I often volunteer to do things in class.	60% (3)	74% (14)	86% (12)	78% (18)	65% (15)	53% (10)	45% (13)	64% (85)
5. I often get discouraged in school.	60% (3)	16% (3)	21% (3)	78% (18)	39% (9)	68% (13)	45% (13)	47% (62)
6. I am slow in finishing my school work.	60% (3)	5% (1)	57% (8)	43% (10)	22% (5)	26% (5)	21% (6)	29% (38)
*7. I am proud of my school work.	40% (2)	100% (19)	93% (13)	83% (19)	91% (21)	68% (13)	76% (22)	83% (109)
*8. I am not doing as well in school as I would like to.	100% (5)	42% (8)	64% (9)	74% (17)	26% (6)	79% (15)	62% (18)	59% (78)
*9. I find it hard to talk in front of the class.	60% (3)	84% (16)	71% (10)	35% (8)	39% (9)	47% (9)	34% (10)	49% (65)
*10. I don't like to be called on in class.	20% (1)	21% (4)	7% (1)	17% (4)	17% (4)	37% (7)	48% (14)	27% (35)

[a]The sample size per item can vary slightly due to missing data.

*Responses to this item differed significantly across grade levels ($p < .05$).

School and School Work. The majority of students feel quite comfortable with their school experience and their school work. For the combined group of respondents, 39% indicated that they often get discouraged in school (item 5) and 56% felt that they were not doing as well in school as they would like to do (item 8). Further, 92% felt that they could get good grades if they wanted to (item 3), 72% felt their school work was fairly easy (item 1), and 82% were proud of their school work (item 7). In addition, only 26% of the Suburban Project Concern students felt that they were slow in finishing their school work (item 6). This is a positive finding in that Project Concern students tend to compare themselves positively to their classroom counterparts in this area of work completion.

Class Participation. The area of class participation is important as the Project Concern students should feel comfortable in their classroom setting. It appears that this is the case since 65% of the combined group indicated they often volunteer to do things in class (item 4). The responses of the Suburban and Inner-City students were essentially the same. Further, 46% felt that they found it hard to talk in front of the class (item 9) and only 24% indicated that they didn't like to be called on in class (item 10). These figures appear typical of school children in general.

Teachers. The student perception that their teachers like them is essential for the development of healthy self-images and school attitudes. For the combined group of Project Concern students, 87% indicated that their teachers usually liked them (item 2). The two groups agreed in their perception of this item.

With respect to differences in self-concept and school attitudes across grade levels, some significant differences similar to previous years data for Suburban participants were evident as follows:

> As grade level increased, more students tended to feel that school work was fairly easy for them (item 1).
>
> As grade level increased, more students felt they could get good grades if they wanted to (item 3).
>
> As grade level increased, fewer students indicated they often volunteer to do things in class (item 4).
>
> As grade level increased, fewer students were proud of their school work (item 7).

For Inner-City participants, the following significant differences in self-concept and school attitudes were again evident across grade levels:

> As grade level increased, fewer students indicated they often volunteered to do things in class (item 4).
>
> As grade level increased, fewer students were proud of their school work (item 7).
>
> As grade level increased, more students felt they were not doing as well in school as they would like to (item 8).
>
> As grade level increased, fewer students found it hard to talk in front of the class (item 9).
>
> As grade level increased, more students didn't like to be called on in class (item 10).

In summary, it can be concluded that the self-concept and school attitudes of the Suburban and Inner-City Project Concern students in the areas of school and school work, classroom participation, and teachers are quite positive. The affective orientation of students participating in the 1982-1983 Project Concern Program is consistent with the results of past evaluations of Project Concern when the Student Survey was used.

CHAPTER III

MONITORING THE SUSTAINED COGNITIVE EFFECTS OF PROJECT CONCERN PARTICIPATION

Background

Chapter II presented an evaluation of the absolute and relative achievement growth of the Project Concern students. It is also important to analyze whether the achievement gains made by Project Concern students are sustained over time. This chapter will present the results of such an evaluation.

The evaluation activities are consistent with the federal law and regulations (ECIA, Chapter 1, Section 200.54) which state the following:

> An LEA that receives Chapter 1 funds shall, at least once every three years, conduct an evaluation of its Chapter 1 project that includes... (b) a determination of whether improved performance is sustained over a period of more than one year.

Further, the evaluation activities are consistent with the policy referenced in the Connecticut Chapter 1 Handbook (May, 1982, p. 42) which states the following:

> LEAs are required by statute to include as part of the evaluation plan a methodology for assessing the long range effects of Chapter 1 programs...

> At least once during the three-year application cycle the LEA must collect additional information needed to determine whether the achievement gains measured over 6 or 12 months are sustained over a longer period of time. A variety of evaluation strategies can be used to fulfill this requirement. Generally, the sustained effects study is based on a testing model which includes a pretest, a posttest, and a follow-up posttest.

Evaluation Design

The sustained effects study actually commenced with the 1981-1982 evaluation when the Spring 1981 data files for grade 3-5 students were created so that the spring 1982 and 1983 data points could be merged into the overall file. These data points were used to answer the following research question:

> How are Project Concern students performing who were in Chapter 1 during the 1981-1982 year and continued in the program during the 1982-1983 year?

Table 9 presents a summary of the evaluation design used to conduct the sustained effects study in the areas of reading and mathematics. Using the Spring 1981 Metropolitan Achievement Test Reading and Mathematics scores as baseline data, the design allowed the sustained effects of 1981 grades 3-5 students to be monitored through spring 1983 when these same students were in grades 5-7. Table 10 presents a further breakdown of the test time dimension. Displayed are the test times, function of the testing and files set up for the three grade levels. Note that only students with test scores for all three test periods have been included in the study. For the three grade levels the total number of students with at least one test score and the number with three complete scores was as follows: grade 3: N=72, N=65; grade 4: N=84, N=75; grade 5: N=89, N=83.

Table 9

Sustained Effects Evaluation Design:

Reading and Mathematics

Evaluation Component	Target Information
A. Program Evaluation Year (Baseline)	1981
B. Subject Areas	Reading, Mathematics
C. Grade Levels (1981)	3, 4, 5
D. Schools	Suburban and Inner-City Project Concern
E. Test	Metropolitan Achievement (1978 Edition)
F. Time Period	Spring 1981, Spring 1982 Spring 1983

Table 10

Sustained Effects Design

Reading and Mathematics

Testing and Data Files

Time of Testing	Function of Testing	Data Files By Grade Levels		
		File 1	File 2	File 3
Spring 1981	Pretest	3	4	5
Spring 1982	Posttest	4	5	6
Spring 1983	Post-Posttest	5	6	7

An Assessment of the Sustained Achievement Effects for Project Concern Students

Tables 11-16 contain the MAT Reading and Mathematics data for the Total Project Concern group as well as the Suburban and Inner-City Components. For each grade level the respective standard scores, percentiles, NCE scores, Chapter 1 NCE gains and sustained effects in NCE units are presented. Following each table a figure is presented which plots the respective NCE scores.

Prior to discussing the results a few comments regarding the interpretation of the data for a sustained effects study are in order. Each table lists achievement scores for three points in time: Spring 1981, Spring 1982, and Spring 1983. Readers will note that the analysis employes the NCE scores which represent relative growth. The scale scores listed in each table represent absolute growth and are used only to generate the corresponding percentile and its associated NCE score. The first two test times are used to calculate the Chapter 1 gain which is labeled "Gain" in each table. These gains are calculated on the basis of the associated NCE scores for the first two test times. The focal point of the table is the sustained effect (labeled "SE") from the second to the third test time based upon the difference of the two NCE scores. It is this SE score which indicates whether the NCE gains made from Spring 1981 to Spring 1982 are sustained from Spring 1982 to Spring 1983. To interpret these scores we note that SE scores near zero would indicate the prior gains were maintained, positive scores would indicate continued growth.

Returning to Tables 11-16 we can now examine the sustained effects of the achievement gains. For example, Table 11 presents the Reading data for the Total Project Concern group. The first section of the table lists the data for the students who were in grade 3 in the Spring of 1981. From Spring 1981 (grade 3) to Spring 1982 (grade 4) their overall Chapter 1 gain was 2.7 NCE units. Note that, since a gain of zero (0) units would indicate no relative growth with respect to the norm group, a gain of 2.7 units is a positive finding. Unfortunately, the relative achievement of these same student's from Spring 1982 (grade 4) to Spring 1983 (grade 5) declined which results in the SE score of -3.2 units. That is, the 1981-1982 gains were not maintained over the 1982-1983 year. Figure 1 contains a plot of the NCE scores for the three test times. The Chapter 1 gains and the sustained effects represented in Table 11 are displayed. Note that only grade 4 (1981) sustained the 1981-1982 gains.

Readers are encouraged to examine the SE scores in Tables 11-16 and the associated plots of the NCE scores in Figures 1-6.

Table 17 contains a summary of the sustained effects units. The data in Table 17 indicates that the gains exhibited for the Spring 1981 grade 3 and grade 5 students from Spring 1981 to Spring 1982 were not maintained in reading for the Suburban, Inner-City and Total Groups. In grade 4 the gains were maintained and in-

creased for all groups. In the area of Mathematics neither Suburban nor Inner-City grade 5 students sustained their 1981-1982 gains; grade 4 students from both groups sustained and increased their 1981-1982 gains. Finally, while the Suburban grade 3 students recovered from a 1981-1982 NCE decrease (see Table 15) to register a positive effect during 1982-1983, the Inner-City students showed a decrease in their relative achievement level from 1981-1982 to 1982-1983.

In summary, the Spring 1982 to Spring 1983 sustained Reading and Mathematics achievement gains were examined in relation to gains made from Spring 1981 to Spring 1982 for 1981 grade 3-5 students. On the basis of comparisions relative to a norm group using NCE scores the following findings were forwarded for the Suburban and Inner-City students.

Grade 3 and 5 Suburban and Inner-City students did not sustain their 1981-1982 Reading gains during the 1982-1983 year.

Grade 4 Suburban and Inner-City students sustained and increased their 1981-1982 Reading gains during the 1982-1983 year.

Grade 3 Suburban students recovered from a 1981-1982 year decrease to show 1982-1983 gains in Mathematics; Inner-City students did not sustain their 1981-1982 Mathematics gains during the 1982-1983 year.

Grade 4 Suburban and Inner-City students sustained and increased their 1981-1982 Mathematics gains during the 1982-1983 year.

Grade 5 Suburban and Inner-City students did not sustain their 1981-1982 Mathematics gains during the 1982-1983 year.

Table 11

Summary by Grade Level of Mean MAT Sustained

Effects for Spring 1981, Spring 1982, and Spring 1983

for Project Concern Students

Total Groups:Reading

Grade (1981)	N	Spring 1981		Spring 1982		Spring 1983
3	65	SS 640 % 39 NCE 44.1	Gain 2.7	SS 675 40 46.8	SE -3.2	697 38 43.6
4	75	SS 684 % 44 NCE 46.8	Gain 1.6	713 47 48.4	SE 4.2	747 55 52.6
5	83	SS 699 % 39 NCE 44.1	Gain 4.8	733 48 48.9	SE -3.7	741 41 45.2

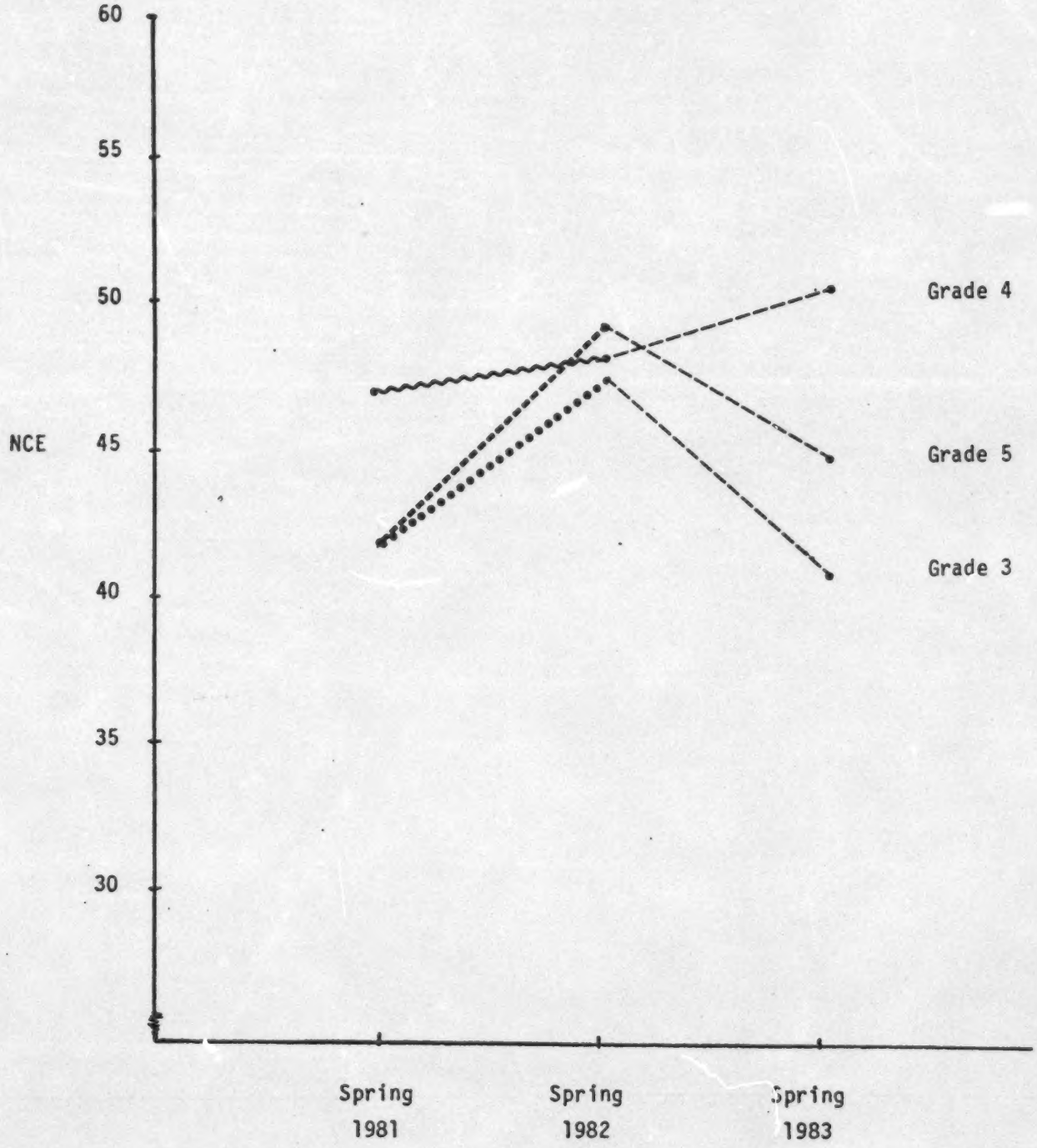

Figure 1. MAT Mean NCE Reading Scores by Spring 1981 by Grade Level Total Project Concern

Table 12

Summary by Grade Level of Mean MAT Sustained

Effects for Spring 1981, Spring 1982, and Spring 1983

for Project Concern Students

Suburban Component:Reading

Grade (1981)	N	Spring 1981		Spring 1982		Spring 1983
3	55	646		678		703
		42		42		41
		45.8	Gain 0	45.8	SE -.6	45.2
4	57	686		714		750
		45		48		57
		47.4		48.9		53.7
			Gain 1.5		SE 4.8	
5	63	702		737		747
		41		50		47
		45.2		50.0		48.4
			Gain 4.8		SE -1.6	

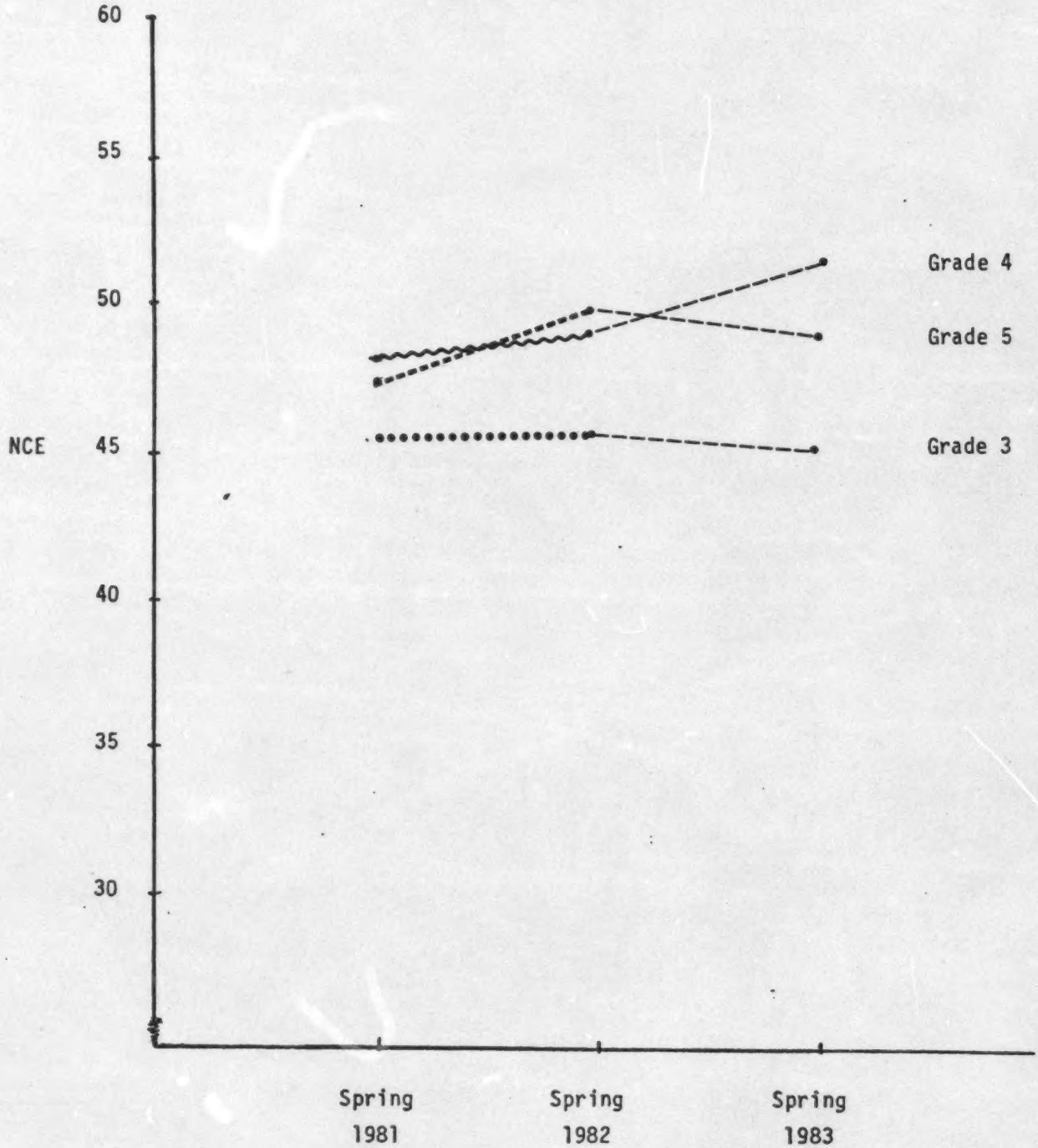

Figure 2. MAT Mean NCE Reading Scores by Spring 1981 Grade Level Suburban Component

Table 13

Summary by Grade Level of Mean MAT Sustained

Effects for Spring 1981, Spring 1982, and Spring 1983

for Project Concern Students

Inner-City Component:Reading

Grade (1981)	N	Spring 1981		Spring 1982		Spring 1983
3	10	604		657		665
		22		31		22
		33.7		39.6		33.7
			Gain 5.9		SE -5.9	
4	18	680		710		739
		43		45		51
		46.3		47.4		50.5
			Gain 1.1		SE 3.1	
5	20	687		720		722
		33		41		34
		40.7		45.2		41.3
			Gain 4.5		SE -3.9	

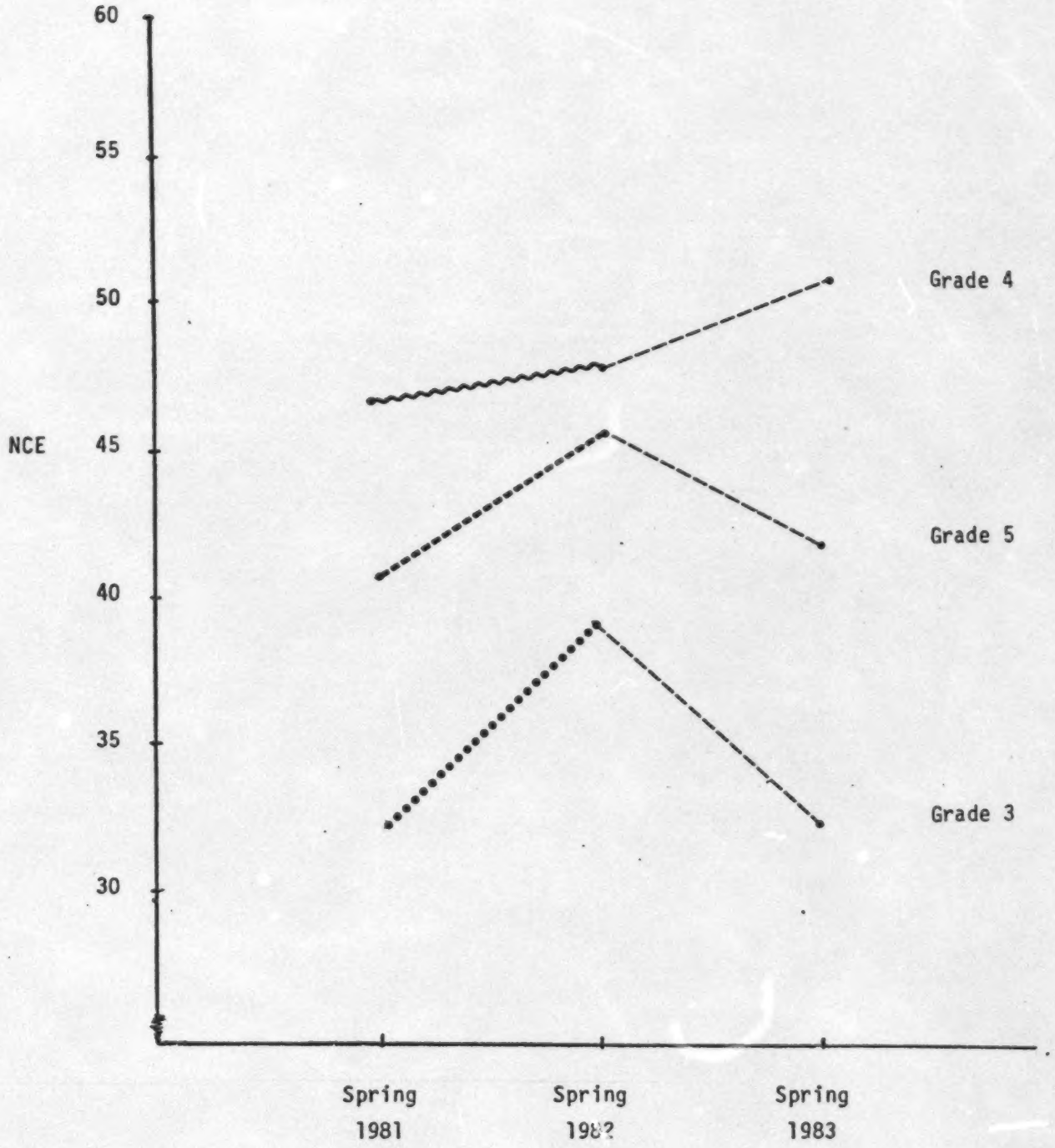

Figure 3. MAT Mean NCE Reading Scores by Spring 1981 Grade Level Inner-City Component

Table 14

Summary by Grade Level of Mean MAT Sustained

Effects for Spring 1981, Spring 1982, and Spring 1983

for Project Concern Students

Total Group:Math

Grade (1981)	N	Spring 1981		Spring 1982		Spring 1983
3	65	554		610		653
		43		44		45
		46.3		46.8		47.4
			Gain .5		SE .6	
4	75	608		666		704
		43		51		53
		46.3		50.5		51.6
			Gain 4.2		SE 1.1	
5	83	658		710		730
		47		55		47
		48.4		52.6		48.4
			Gain 4.2		SE -4.2	

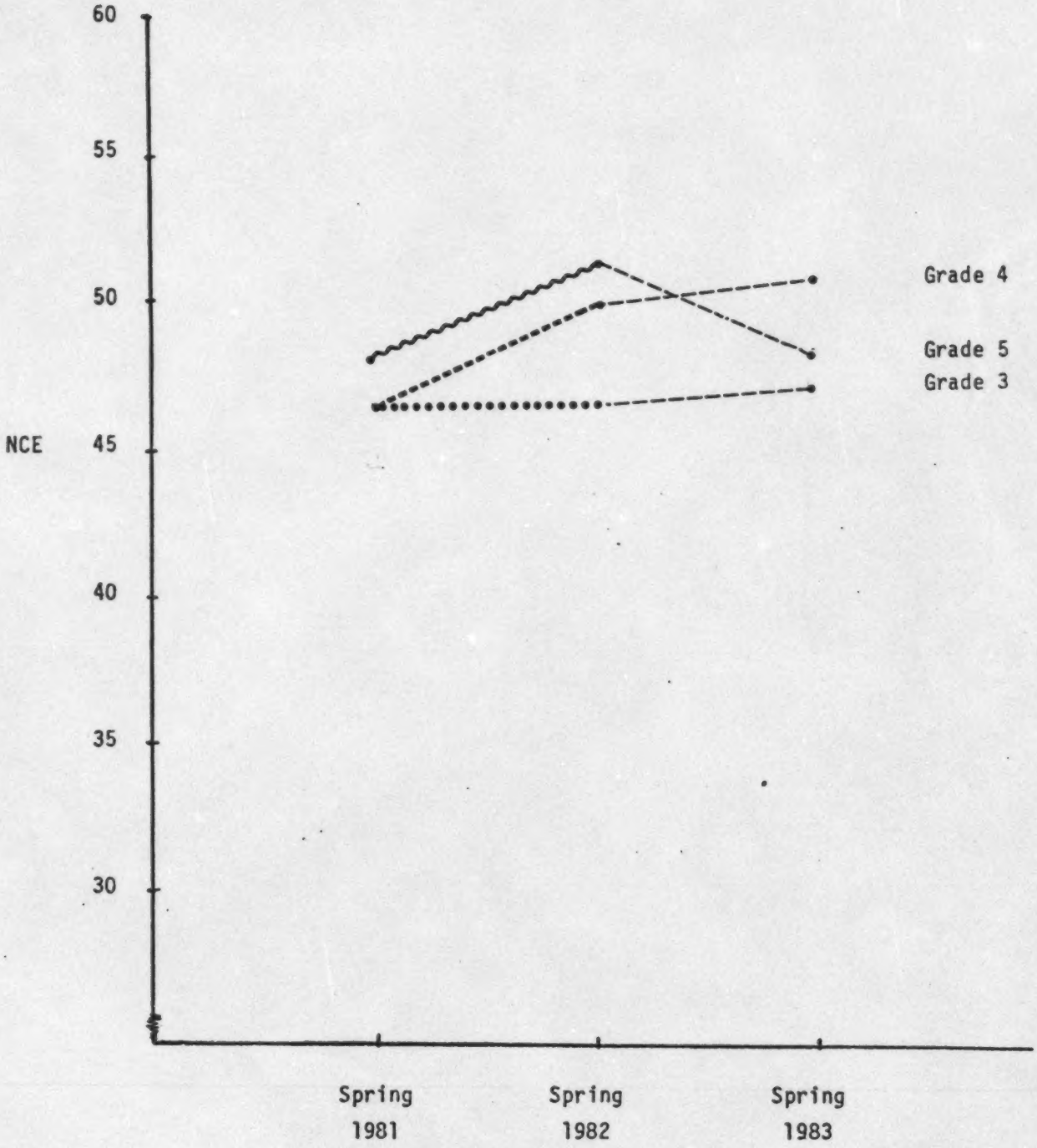

Figure 4. MAT Mean NCE Math Scores by Spring 1981 Grade Level Total Project Concern

Table 15

Summary by Grade Level of Mean MAT Sustained

Effects for Spring 1981, Spring 1982, and Spring 1983

for Project Concern Students

Suburban Component:Mathematics

Grade (1981)	N	Spring 1981		Spring 1982		Spring 1983
3	55	558		605		650
		45		41		43
		47.4		45.2		46.3
			Gain -2.2		SE 1.1	
4	57	613		665		702
		45		51		53
		47.4		50.5		51.6
			Gain 3.1		SE 1.1	
5	63	667		713		735
		51		57		50
		50.5		53.7		50.0
			Gain 3.2		SE -3.7	

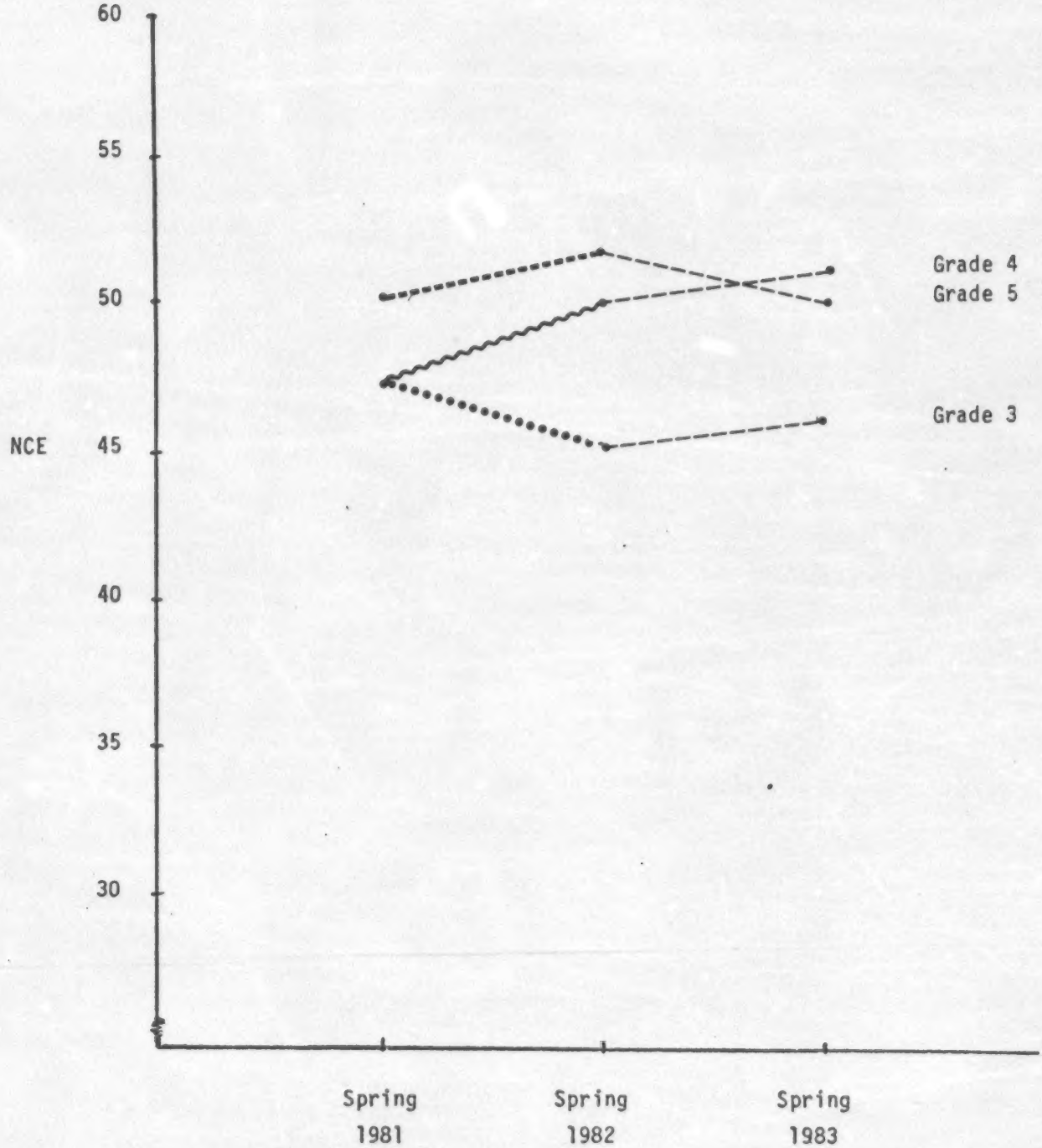

Figure 5. MAT Mean NCE Math Scores by Spring 1981 Grade Level Suburban Component

Table 16

Summary by Grade Level of Mean MAT Sustained

Effects for Spring 1981, Spring 1982, and Spring 1983

for Project Concern Students

Inner-City Component:Math

Grade 1981	N	Spring 1981		Spring 1982		Spring 1983
3	10	534		637		673
		35		57		54
		41.9		53.7		52.1
			Gain 11.8		SE -1.6	
4	18	592		669		710
		35		53		55
		41.9		51.6		52.6
			Gain 9.7		SE 1.0	
5	20	632		703		718
		34		53		40
		41.3		51.6		44.7
			Gain 10.3		SE -6.9	

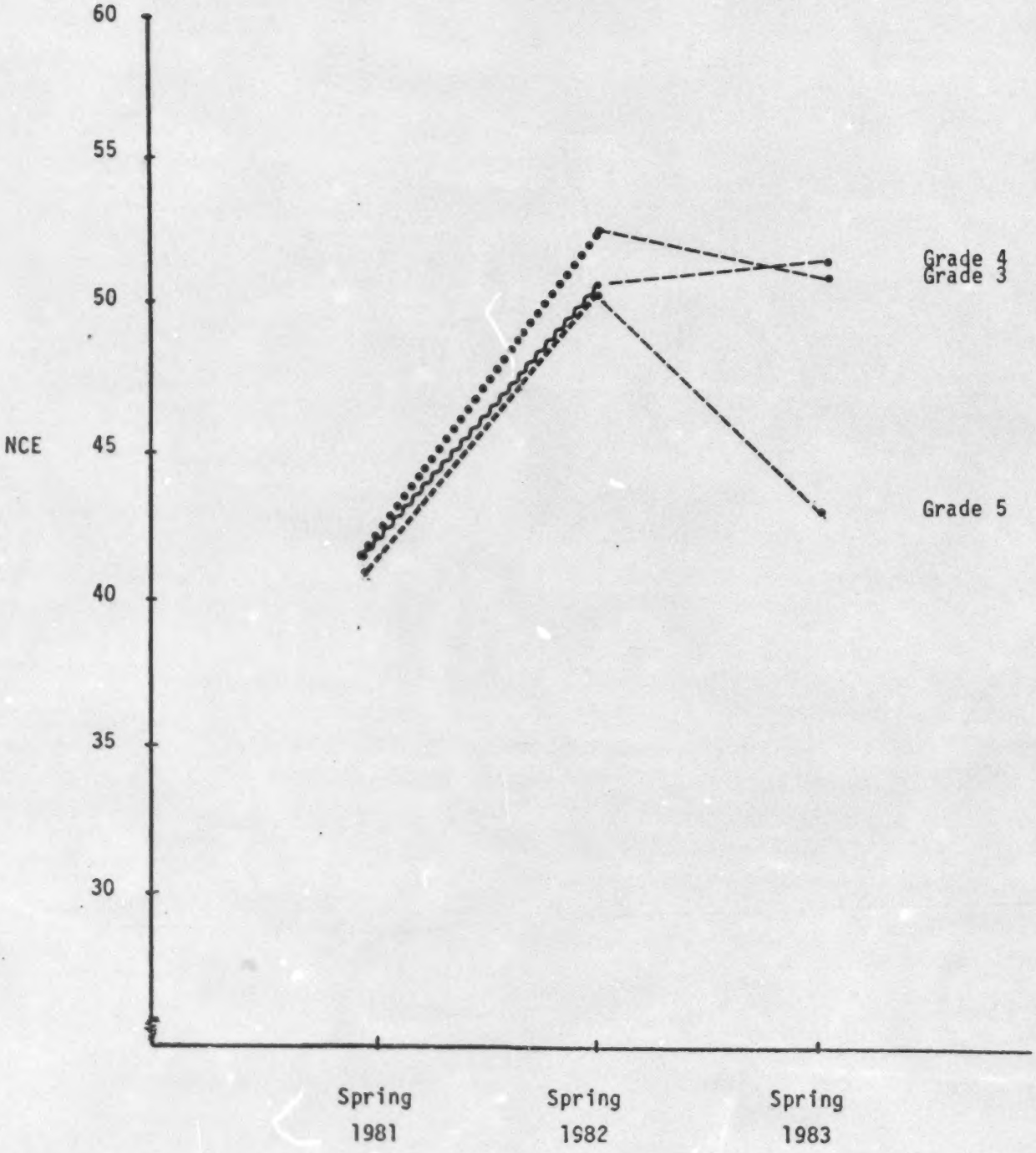

Figure 6. MAT Mean NCE Math Scores by Spring 1981 Grade Level Inner-City Component

Table 17

Summary of Sustained Effects (Spring 1982-Spring 1983) in Reading and Mathematics

Spring 1981 Grade	Reading			Mathematics		
	Suburban	Inner-City	Total	Suburban	Inner-City	Total
3	-.6	-5.9	-3.2	1.1	-1.6	.6
4	4.8	3.1	4.2	1.1	1.0	1.1
5	-1.6	-3.9	-3.7	-3.7	-6.9	-4.2

CHAPTER IV

SUMMARY

The evaluation of the 1982-83 Project Concern program focused on the following two areas:

1. An examination of the cognitive and affective impact of Project Concern.
2. An evaluation of the sustained cognitive effects of Project Concern participation.

The purpose of this summary is to collate for the reader some of the major findings of this evaluation. It is important to note that perceptions of the Project Concern program should not be formed on the basis of this summary alone. All findings must be interpreted in light of the evaluation design utilized, a more complete discussion of the results presented, and the limitations placed on the findings obtained.

An Examination of the Cognitive and Affective Impact of Project Concern

The impact of Project Concern on the cognitive achievement of program participants was assessed by comparing the Metropolitan Achievement Test results from Spring 1982 to those obtained during Spring 1983. It is important to note that some difficulty was encountered in testing Suburban Project Concern students. Personnel in participating suburban school settings were less than positively motivated to conduct the required testing activities given that the Hartford Board of Education had not decided whether the Suburban Project Concern Program would be continued during the next school year.

Achievement growth on an absolute basis addressed the question - how much basic skill growth have Project Concern students exhibited? The following conclusions were forwarded:

> With the exception of grades 7 and 10, Suburban Project Concern participants exhibited statistically significant (.01 level) basic skill growth in Reading, Language, and Mathematics.
>
> At grade 7, Suburban Project Concern participants exhibited statistically significant (.01 level) basic skill growth in Language and Mathematics, but not in Reading.
>
> At grade 10, Suburban Project Concern Participants did not exhibit statistically significant (.01 level) growth in any of the skill areas tested.
>
> At grade 4, Inner-City Project Concern Participants exhibited statistically significant (.01 level) basic skill growth in Reading and Language, but not in Mathematics.
>
> At grades 6 and 8, Inner-City Project Concern participants exhibited statistically significant (.01 level) basic skill growth in Reading, Language, and Mathematics.
>
> At grades 5 and 7, Inner-City Project Concern participants did not exhibit statistically significant (.01 level) growth in any of the skills areas tested.

In assessing relative growth, one is asking the question - as a result of the achievement progress exhibited in the areas tested, has the relative standing of the students changed regarding the national norm group? The following conclusions were forwarded:

> Inner-City Project Concern participants tended to exhibit relative basic skill growth in those areas at each grade level where statistically significant absolute growth was evident. This indicates that the statistically significant basic skill progress exhibited by these students was generally reflected in an improvement in their standing relative to the national norm group.
>
> For Suburban Project Concern participants, the relationship between absolute and relative basic skill growth tended to be mixed. For Reading and Language, relative basic skill growth was exhibited at most grade levels when statistically significant growth was evident. For Mathematics, statistically significant basic skill growth often was not reflected in an improvement in the students' standing relative to the national norm group.

Further insights into the relative basic skill growth of participants was obtained by grouping students on the basis of their Spring 1981 percentile ranks. The following trends were found:

> For both Suburban and Inner-City Project Concern Participants, students at or below the 50th percentile at most grade levels tended to exhibit the most NCE growth in Mathematics.
>
> For both Suburban and Inner-City Project Concern Participants, students at or below the 50th percentile at most grade levels tended to exhibit the most NCE growth in Reading. At many grade levels substantial Reading growth was achieved by students at or below the 23rd percentile.

In summary, both Suburban and Inner-City Project Concern participants tended to exhibit statistically significant basic skill growth in the areas of Reading, Language, and Mathematics at most grade levels. While such significant absolute growth was reflected in positive relative growth for Inner-City participants, this was not always the case for Suburban participants.

To examine the affective area, the Student Survey was administered during the spring of 1982 to participants in the Suburban and Inner-City components of Project Concern at grades 2-10. With respect to differences in self-concept and school attitudes across grade levels, some significant differences similar to previous years data for Suburban participants were evident as follows:

> As grade level increased, more students tended to feel that school work was fairly easy for them (item 1).
>
> As grade level increased, more students felt they could get good grades if they wanted to (item 3).
>
> As grade level increased, fewer students indicated they often volunteer to do things in class (item 4).
>
> As grade level increased, fewer students were proud of their school work (item 7).

For Inner-City participants, the following significant differences in self-concept and school attitudes were again evident across grade levels:

As grade levels increased, fewer students indicated they often volunteered to do things in class (item 4).

As grade level increased, fewer students were proud of their school work (item 7).

As grade level increased, more students felt they were not doing as well in school as they would like to (item 8).

As grade level increased, fewer students found it hard to talk in front of the class (item 9).

As grade level increased, more students didn't like to be called on in class (item 10).

In summary, it can be concluded that the self-concept and school attitudes of the Suburban and Inner-City Project Concern students in the areas of school and school work, classroom participation, and teachers were quite positive. The affective orientation of students participating in the 1982-83 Project Concern Program was consistent with the results of past evaluations of Project Concern when the Student Survey was used.

An Evaluation of the Sustained Cognitive Effect of Project Concern Participation

In conducting this sustained cognitive effects study, the Spring 1982 to Spring 1983 sustained Reading and Mathematics achievement gains for Project Concern participants were examined in relation to gains made from Spring 1981 to Spring 1982. This study focused on students who were enrolled at grades 3-5 during the spring of 1981. On the basis of norm group comparisons using NCE scores, the following findings were forwarded for the Suburban and Inner-City students.

Grade 3 and 5 Suburban and Inner-City students did not sustain their 1981-82 Reading gains during the 1982-83 year.

Grade 4 Suburban and Inner-City students sustained and increased their 1981-82 Reading gains during the 1982-83 year.

Grade 3 Suburban students recovered from a 1981-1982 year decrease to show 1982-83 gains in Mathematics; Inner-City students did not sustain their 1981-82 Mathematics gains during the 1982-1983 year.

Grade 4 Suburban and Inner-City students sustained and increased their 1981-1982 Mathematics gains during the 1982-1983 year.

Grade 5 Suburban and Inner-City students did not sustain their 1981-1982 Mathematics gains during the 1982-1983 year.